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EXAMINER

VARGOT, MATHIEU D

ART UNIT PAPER NUMBER

1732

DATE MAILED: 04/24/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/928,247

Applicant(s)

MULLEN

Examiner

M. VARBET

Group Art Unit

1732

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address —

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- ☐ Responsive to communication(s) filed on \_\_\_\_\_
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 1-30 is/are pending in the application.
- Of the above claim(s) 1-14, 22 + 30 is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 15-21 + 23-29 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement

## Application Papers

- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).
- ☐ All ☐ Some\* ☐ None of the:
  - ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s) 6 + 7
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other \_\_\_\_\_

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1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-14, 22 and 30, drawn to a structure with first and second cured portions, classified in class 428, subclass 156.
  - II. Claims 15-21 and 23-29, drawn to a method for forming a pattern in a curable material and a pattern transfer structure, classified in class 264, subclass 494.

The inventions are distinct, each from the other because:

Inventions II and I are related as process and apparatus of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process and apparatus as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process and apparatus (MPEP § 806.05(f)). In the instant case the product as claimed can be made by a different process and apparatus such as one not requiring a mask--ie, portions of the same material cured to different amounts can be bonded together with an adhesive which matches the degree of curing of one or the other portions.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

During a telephone conversation with Mr. Conway on April 2, 2003 a provisional election was made with traverse to prosecute the invention of Group II, claims 15-21 and 23-29.

Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-

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14, 22 and 30 have been withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

2. Claims 28 and 29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 28 and 29, in calling for "the structure of claim 27", are improperly dependent on claim 27 which recites a method. Also, the language "said first cured portion" and "said second cured portion" lacks antecedent basis in claim 27.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 15-19 and 23-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Bawa et al (see Figs. 1, 2, 5 and 6 and the Example).

Bawa et al discloses the instant method and apparatus (ie, pattern transfer structure) for forming a pattern in a radiation curable material by providing a blocking pattern between a UV radiation source (col. 5, lines 14-15) and a radiation curable material and curing the material through the blocking pattern. The curable material is disclosed in the example as a methacrylate and the example also teaches using UV radiation.

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4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 20, 21 and 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nilsen et al in view of Bawa et al.

Nilsen discloses applying UV radiation curable material to a rotating prism mold (see Figs. 3A-3C) and laminating same to a base film (63) during the UV curing of the material. The primary reference essentially lacks the aspects of using a blocking pattern between the UV source and the curable material. As noted in paragraph 3, supra, such is clearly shown in Bawa et al. It would have been obvious to one of ordinary skill in the art at the time of invention to have modified the process of Nilsen as taught by Bawa et al dependent on the exact nature of the retroreflective sheeting desired. For instance, Bawa et al teaches (Fig. 5) concentric circles to impart a Fresnel pattern on a lens and such would have been advantageously desired on retroreflective sheeting for added optical effect. Note that Bawa et al discloses that the lens of Figure 6 shown therein has bifocal capabilities--see column 3, line 7. This is submitted to render the limitations of instant claims 28 and 29 as met in the combination as applied. For the lens to have bifocal capabilities, the index of refraction and/or density of the cured portions must be different.

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5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Vargot whose telephone number is 703 308-2621.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308-0661.

M. Vargot

April 19, 2003

*M. Vargot*  
MATHIEU D. VARGOT  
PRIMARY EXAMINER  
GROUP 1300

*4/19/03*